

1.6.2 Prescriptive Packages

§151(f)

The prescriptive requirements are organized by packages. The prescriptive packages are the simplest and least flexible compliance path. The central prescriptive package, Package D, establishes the stringency of the Standards for the performance approach. Approved computer programs model a house with the features of Package D to determine the space conditioning and water heating budgets.

Each prescriptive package is a set of pre-defined performance levels for various building components. Each building component must meet or exceed the minimum efficiency level specified in the package. There are two packages to choose from: Package C (the all-electric house, applied to locations where natural gas is not available) and Package D. (Packages A and B were eliminated in the 2001 Standards.)

Package D and the Package D Alternative are presented in Table 151-C (and its footnotes) in the Standards (also in Appendix B of this document). Package C is presented in Table 151-B of the Standards (Appendix B of this document).

- Standard Package D. The Package D prescriptive requirements serve as the basis of the standard design in the performance approach and determine the energy budget of a proposed design. These prescriptive requirements require that split system air conditioners or heat pumps (for definition see Joint Appendix I) be diagnostically tested to verify that they have the correct refrigerant charge (or field-verified that they are equipped with a thermostatic expansion valve) and that air distribution ducts be diagnostically tested to verify that leakage is less than 6%.
- Alternative Package D. This is a modification to Standard Package D that does not require field verification and/or diagnostic testing. Fenestration performance and space cooling system (or in some cases the heating system) efficiency is more stringent instead. This alternative package achieves equal energy savings to Standard Package D.
- Package C. This package allows electric resistance space heat, but increases stringency for most envelope features to make up for the additional TDV energy that would be used by the electric heating systems. Electric resistance water heating may also be used with Package C if the water heater is located within the building envelope and 25% of the water heating is provided by solar or a wood stove boiler where allowed. See Section 151(f)8.

1.6.3 Performance Approach

The performance approach, also known as the computer method, requires that the annual TDV energy be calculated for the proposed house and compared to the TDV energy budget. TDV energy is the “currency” for the performance approach. TDV energy not only considers the type of energy that is used (electricity, gas, or propane), but also when it is used. Energy saved during periods when California is likely to have a statewide system peak is worth more